

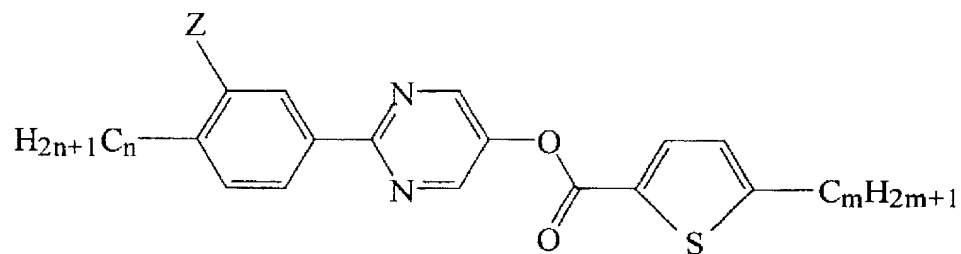
n	11	12	13	14	13	14	12	13	14	13	14	10	11	12	13	14	13	14	9	10	11	12	13	10
m	5	5	5	5	6	6	7	7	7	8	8	9	9	9	9	9	10	10	11	11	11	11	11	12
X	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

n	11	12	13	14	6	6	6	6	6	6	6	6	6	7	7	7	7	7	7	7	7	8	8	
m	12	12	12	12	4	5	6	7	8	9	10	11	12	4	5	6	7	8	9	10	11	12	4	6
X	-	-	-	-	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

n	8	8	8	8	9	9	9	9	9	9	9	9	10	10	10	10	10	10	10	10	11	11	11	11
m	8	10	11	12	4	5	6	8	9	10	11	12	4	5	7	8	9	10	11	12	4	5	6	7
X	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O	O

n	11	11	11	11	11	12	12	12	12	12	12	12	12
m	8	9	10	11	12	5	6	7	8	9	10	11	12
X	O	O	O	O	O	O	O	O	O	O	O	O	O

Compounds of the general formula (XXXII), where:



n	5	5	5	5	5	5	5	5	6	6	6	6	6	6	6	6	7	7	7	7
m	2	3	4	5	6	7	8	9	2	3	4	5	6	7	8	9	2	3	4	5

n	7	7	7	7	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9	10	10	10	10	10	
m	6	7	8	9	2	3	4	5	6	7	8	9	2	3	4	5	6	7	8	9	2	3	4	5	6

n	10	10	10	11	11	11	11	11	11	11	11	12	12	12	12	12	12	12	12	13	13	13
m	7	8	9	2	3	4	5	6	7	8	9	2	3	4	5	6	7	8	9	2	3	4

n	13	13	13	13	13	14	14	14	14	14	14	14	14
m	5	6	7	8	9	2	3	4	5	6	7	8	9

and where Z is H or F in all cases.

- 5 Thiophenecarboxylic esters in which the heterocycle may not be fluorinated are generally described in EP-A-0 364 923. EP-A-0 459 406 describes thiophenecarboxylic esters in which the phenyl group has to be substituted by fluorine. In EP-A-0 392 510, the phenylene group has to be 2,3-cyano-substituted.

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Tetrahydroquinazolines are generally described in US 4,402,849. An example of compounds of this type can be found in JP-A-08059629, and in JP-A-08062559 and JP-A-07207267.

- 15 The examples which follow illustrate the invention. Mixtures according to the invention are given in Examples 1-15.

Example 1

- 20 An LCD test cell is prepared from two commercially available glass plates which are transparently and conductively coated with indium-tin oxide. The plates are spin-coated (2 500 rpm, 10 s) with the alignment layer LQT-120 (from Hitachi Chemicals KK) which was diluted to 8.3% of its original solids content using N-methylpyrrolidone, cured by heating (230°C, 1 hour) and then aligned by subjecting them to a rubbing process (rubbing material:
- 25 rayon type YA-20-R*, clearance 0.2 mm, once, roller speed 700 rpm, substrate speed 10 cm/s, roller diameter 10 cm).

The rubbed glass plates are arranged such that the rubbing direction is parallel, adhesively bonded to produce test cells and set 1.3 μm apart by means of a spacer.

A mixture consisting of

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Compound	Content	Structure
1	24.1%	
2	24.1%	
3	19.2%	
4	28.9%	
5	3.8%	

having the phase transitions I/N* 81.6-85.9 and N*/Sc* 59.3°C is introduced into the cell and initially aligned in the nematic or cholesteric phase by cooling. On further cooling, a 3 volt direct voltage is applied and the cell is transferred into the Sc* phase (chiral smectic C) range at a cooling rate of 2 K/min. During this process, a monostable monodomain is formed which is characterized by a certain temperature dependence of the tilt angle which is assessed by experiments in a polarizing microscope.

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